

REMARKS

No new matter is added by this amendment. The present application was filed on December 31, 2001 and claims priority to U.S. Provisional Patent Application Serial No. 60/259,003 filed December 29, 2000 and is a continuation-in-part application of U.S. Patent Application Serial No. 08/949,213. The present application was filed with original claims 1-59. By this amendment, claims 1, 9, 11, 15, 40, 51, and 54 are amended and new claims 60-65 have been added. The claims remaining in consideration are claims 1-65. Reconsideration is respectfully requested.

Claims 1-8, and 40-50 were rejected under 35 USC §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With regard to claim 40, the Examiner points out that the claim language suggests:

a plurality different design templates, yet lines 8-13 use the phrase “*each design template*” (italics added, line 11) suggestive that (somehow) the method claim is limited to include all of the alternatives on lines 8-13. Current office action, page 2, second paragraph.

Applicants have amended claim 1 to more clearly identify the subject matter regarded as the invention and to address the deficiencies noted by the Examiner. Specifically, claim 40 has been amended to clearly state that “at least one design template” is provided in the first state. The at least one design template has a torso section which is chosen from a group including “a large male, a medium male, and a small female”. Furthermore, the torso section has one an “ERECT posture, a NEUTRAL posture, and a SLUMPED posture”. Applicants respectfully assert that the claim language is now definite and request that the §112 rejection of claim 40 and dependent claims 41-50 be withdrawn.

With regard to claim 1, the Examiner remarks:

what does the “cross-sectional section” refer to in the disclosure? Is it a second to the “torso section”, suggestive that the same structure is claimed twice? If so, the template is directed to a “section” (line 5) only, and this it is unclear what the “torso section” is a section of.

Claim 1 is directed towards a design template for use with a seat. The design template includes a torso section and at least one cross-sectional section. In the illustrated embodiment of the specification, the torso section is clearly referred to by reference number 22 and shown in at least Figures 1-5, 8-12. Likewise, cross-sectional section(s) are clearly referred to by referenced number 100 and shown in Figures 17A-17F, 18A-18F and 19A-19F. Applicants respectfully assert that the present invention as embodied in claim 1 clearly refers to a design template with a torso section (22) and a cross-sectional section (100). This is clearly supported by the specification. For these reasons, applicants respectfully request that the §112 rejection of independent claim 1 and dependent claims 2-8 be withdrawn.

The Examiner has not rejected claims 40-50 under any paragraph of 35 USC §102 or §103 based on prior art. With the withdrawal of the §112 rejection of independent claim 40, applicant respectfully asserts that independent claim 40 and dependent claims 41-50 are allowable. Confirmation of the allowance of claims 40-50 is respectfully requested.

Claims 1-3, 8, 9, 11-15, 37, 51, 52, 57-59 were rejected under 35 USC §102(a) or (b) as being anticipated by “Kinetic Computer Modeling of Human Posture in Automotive Seats” by Ekern (“Ekern”). Alternatively, claims 1-3, 8, 9, 11-15, 37, 51, 52 and 57-59 were rejected under 35 USC §103(a) as being obvious over Ekern. These alternative rejections are respectfully traversed.

Claims 1, 9, 11, 15, 37, 51, and 57 are independent claims.

The present invention, as embodied in independent claim 1, sets forth a design template for use with a seat. The design template includes a torso section and at least one cross-sectional section. The torso section is one of a large male, a medium male and a small female and has an ERECT posture, a NEUTRAL posture or a SLUMPED posture. The at least one cross-sectional section has at least one anatomical landmark and cooperates with the torso section at the anatomical landmark. The at least one cross-sectional section describes a body seat interface at the at least one anatomical landmark.

In the illustrated embodiment, the at least one anatomical landmarks is along a centerline contour of the design template. The at least one cross-sectional section are located at the anatomical landmark and generally transverse to the torso section. At the anatomical landmark, the cross-sectional section is used to define “the shape of the occupied and unoccupied free seat contours of the seat”, i.e., “the shape of the body seat interface and important skeletal landmarks”, (see page 48, line 13 to page 50, line 25). Thus, the cross-sectional section describes “a body seat interface at the at least one anatomical landmark”, as required by claim 1.

Independent claim 9 sets forth an occupant restraint system having a lap belt and a shoulder belt. Both the lap belt and the shoulder belt are anchored to a vehicle structure with respect to a design template having a torso section and at least one cross-sectional section which describes “a body seat interface at the at least one anatomical landmark”.

Independent claim 11 sets forth a method of establishing accommodation criteria in a vehicle package using a design template having a torso section and at least one cross-sectional section which describes “a body seat interface at the at least one anatomical landmark”.

Independent claims 15 and 37 set a method for designing a seat using a design template having a torso section and at least one cross-sectional section which describes “a body seat interface at the at least one anatomical landmark”.

Independent claim 51 sets forth a seat having a seat cushion and a seat back. At least one parameter of the seat is designed relative to a design template having a torso section and at least one cross-sectional section which describes “a body seat interface at the at least one anatomical landmark”.

In contrast, Ekern discloses (1) an SAE 2-D Drafting Template (Figure 1), (2) an SAE 3-D Testing Manikin, (3) a 2-D computer model. However, neither the template, manikin, or computer model disclose or teach a template having a torso section and at least one cross-section segment which describes the body seat interface, as required by amended independent claim 1.

Therefore, since Ekern does not teach at least one element of the present invention, as embodied in each of independent claims 1, 9, 11, 15, 37 and 51, applicants respectfully assert that the present invention as embodied in these claims is neither taught nor suggested by Ekern. Furthermore, claims 2-3, 8, 12-14, 52, and 57-59 are ultimately dependent upon an allowable claim. Therefore applicants respectfully assert that claims 2-3, 8, 12-14 52, and 57-59 are also allowable. Applicants respectfully request the withdrawal of the rejection based on Ekern.

Claims 1-3, 6, 7, 11-15, 32, 37, 51, 52, and 57-59 were rejected under 35 USC §102(b) as being anticipated by US Patent 3,147,617 issued September 8, 1964 to Vincent Kaptur et al (Kaptur). This rejection is respectfully traversed.

Kaptur discloses an accommodation checking device with a seat pan (66) which has a lower outer surface (68) which is “shaped to conform to the lower surface of the

upper leg portions or thighs and buttocks of the predetermined human male”. Kaptur does not include or teach a template with a torso section and at least one cross-sectional section, as required by independent claims 1, 11, 15, 32, and 37. Since Kaptur does not include at least one element of the independent claims, applicants respectfully assert that the §102(b) rejection is improper and request that it be withdrawn. Claims 2-3, 6, 7, 12-14, 52 and 57-59 are dependent upon an allowable claims. Therefore, for the reasons set forth above, and based on their own merits, applicants respectfully assert that claims 2-3, 6, 7, 12-14, 52, and 57-59 are also allowable.

The Examiner indicated that claims 10, 16-31, 33-36, 38, 39, and 53-56 contained allowable subject matter. This is noted with appreciation.

New claims 60-65 describe a design template or a restraint system or method utilizing design template which is not taught nor suggested by either Ekern or Kaptur. Applicants respectfully assert that these claims are allowable.

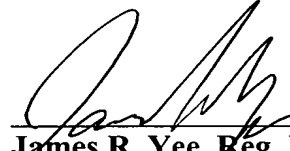
All of the Examiner’s objections and rejections having been successfully overcome or made moot, Applicants respectfully assert that the present application is now in condition for allowance and request a early notice of allowance. If the Examiner believes that a telephone interview would be helpful, please contact the undersigned at the number provided.

If any fees are due with this submission, or at anytime during the pendency of this application, the Commissioner is hereby authorized and respectfully requested to charge our Deposit Account 08-2789.

Serial No. 10/035,990
Atty Docket: 60,598-003

Respectfully submitted,

HOWARD & HOWARD ATTORNEYS, P.C.

A handwritten signature in black ink, appearing to read 'James R. Yee', is written over a horizontal line.

James R. Yee, Reg. No. 34,460
39400 Woodward Avenue, Suite 101
Bloomfield Hills, Michigan 48304-5151
(248) 723-0349

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